INTRODUCTION

The St James Water District is pleased to present to you this year's Water Quality Report. The report is required to be delivered to all residents of our district in compliance with Federal and State regulations. Our goal is to provide you with safe and dependable supply of drinking water everyday. We also want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. The Board of Water Commissioners and District employees are committed to ensuring that you and your family receive the highest quality water.

We are pleased to report that our drinking water is safe and meets all Federal and State requirements. If you have any questions about this report or concerning your drinking water, please contact Superintendent Christopher Nustad at the St. James Water District at (631) 584-6202. If you want to learn more, please attend any of our regularly scheduled Board of Water Commissioners meetings. Please call the Water District for a schedule of meetings and their locations.

WHERE DOES OUR WATER COME FROM?

In general, the sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activities. Contaminants that may be present in source water include: microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the USEPA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water source comes from beneath the ground and is referred to as groundwater. Your water is stored beneath the ground in a sandy geological formation known as the Aquifer System. Water in the Aquifer System originates as precipitation, which slowly percolates down through the soil. There are three primary formations that lie one on the other to make up the Long Island Aquifer System. These formations in order are: **Glacial** – which contains the newest water to the groundwater system, **Magothy** – this is the largest of the three formations and holds the most water, most of it being hundreds of years old and **Lloyd** – which is a largely untapped layer, containing the oldest water, some that has been held in the system more than 5,000 years. The depth of the Long Island Aquifer System is approximately 600 feet on the north shore, and approximately 2000 feet on the south shore. Most of our drinking water comes from the Glacial and Magothy formations. Please refer to the system example shown further on.

The St. James Water District purchases its water from the Suffolk County Water Authority (SCWA). SCWA maintains over 400 public supply wells throughout Suffolk County. We have eleven (11) interconnections with Suffolk County Water Authority. During 2012, our system did not experience any restriction of our water source.

FACTS AND FIGURES

The St James Water District was formed in 1945 as a municipal water district, and roughly covers the same boundaries as the St James Fire District. We have about 59 miles of water main, and 460 fire hydrants (our hydrants are painted orange and silver). We serve about 11,200 people through 3260 connections. The total amount of water withdrawn in 2012 was 604 million gallons, of which approximately 97% was billed directly to the customers. The rest is used for water main breaks, the annual water main flushing program, and fire fighting. The District utilizes a unit price quarterly billing schedule with the consumer being billed at $1.80 per 1,000 gallons and a base fee of $18.25.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: total coliform, bacteria, turbidity, inorganic compounds, nitrate, nitrite, 26 metals including lead and copper, 85 volatile organic compounds, total trihalomethanes, and synthetic organic compounds which include 22 pesticides. The table of detected contaminants describes compounds that were detected in your drinking water. We have also tested for other contaminants that were not found in your drinking water. A complete list can be obtained from our office. The State allows us to test for some contaminants less than once a year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than a year old.

SCWA provides treatment at all wells to improve the quality of the water pumped prior to distribution to the consumer. The pH of the pumped water is adjusted upward to about 7.2 to reduce corrosive action between the water and water mains and in-house plumbing by the addition of lime. Chlorine is also added to the water for disinfecting purposes.

The hardness of our water is considered low (soft). We average 23 ppm. Hardness expressed as calcium carbonate (CACO3), and increases the consumption of soap.

SCWA provides the well water quality test results, H2M Labs, Inc., and the Suffolk County Health Department tests our water.

It should be noted that all drinking water, including bottled drinking water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791) or the Suffolk County Health Department at (631) 852-5810.

St. James Water District
460 Lake Avenue
St. James, NY 11780

MAY 2013

ST. JAMES WATER DISTRICT

2012 ANNUAL DRINKING WATER QUALITY REPORT

YEAR: 2012	TABLE OF DETECTED CONTAMINANTS						ST JAMES WATER DISTRICT
CONTAMINANT	# of Samples	DATES 2012	LEVEL DETECTED	UNIT of MEASURE-MENT	MCLG	REGULATORY LIMIT (MCL OR AL)	LIKELY SOURCE of CONTAMINANT
Metals							
Aluminum	1	4/19	16	ug/l	n/a	n/a	Naturally occurring
Barium	3	1/17, 4/19, 8/14	ND-.007	mg/l	n/a	MCL = 2	Discharge of Drilling wastes; Erosion of natural deposits.
Calcium	1	4/19	17.5	mg/l	n/a	n/a	Added to water as lime as pH control.
Copper	1	4/19	.106	mg/l	1.3	AL = 1.3	Corrosion of household plumbing systems; Erosion of natural deposits.
Iron	3	1/17, 4/19, 8/19	ND-.07	mg/l	n/a	MCL = 0.3	Naturally occurring
Iron Manganese Total	3	1/17, 4/19, 8/19	ND-.008	mg/l	n/a	MCL= .50	Naturally occurring
Magnesium	1	4/19	5.7	mg/l	n/a	n/a	Naturally occurring
Manganese	3	1/17, 4/19, 8/19	ND-.008	mg/l	n/a	MCL = 0.3	Naturally occurring; Indicative of landfill contamination
Nickel	1	4/19	.9	ug/l	n/a	100	Naturally occurring
Potassium	1	4/19	1.4	mg/l	n/a	n/a	Naturally occurring
Sodium	3	1/17, 4/19, 8/14	9.9-18.4	mg/l	n/a	No MCL*	Naturally occurring; Road salt; Water softeners; Animal waste
Strontium	1	4/19	59.7	ug/l	n/a	No MCL	Naturally occurring
Inorganics							
Chloride	3	1/17, 4/19, 8/14	12-34	mg/l	n/a	MCL = 250	Naturally occurring or road salt contamination
Nitrate	3	1/17, 4/19, 8/14	.83-4.38	mg/l	10	MCL = 10	Runoff from fertilizer and leaching from septic tanks and sewage.
Sulfate	1	4/19	8	mg/l	n/a	MCL = 250	Naturally occurring
Volatile Organics							
Bromodichloromethane	2	4/19, 8/14	.6-1.0	ug/l	n/a	MCL = 80	Disinfectant by-products
Chlorodibromomethane	1	4/19	0.8	ug/l	n/a	MCL = 80	Disinfectant by-products
Chloroform	2	4/19, 8/14	.5-1.3	ug/l	n/a	MCL = 80	Disinfectant by-products
Dibromochloromethane	1	8/14	.8	ug/l	n/a	MCL = 80	Disinfectant by-products
Total Trihalomethanes	1	8/14	3.1	ug/l	n/a	MCL = 80	Disinfectant by-products

Definitions: Maximum Contaminant Level (MCL) - The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible.
Maximum Contaminant Level Goal (MCLG) - The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
Action Level (AL) - The concentration of a contaminant which, if exceeded, trigger treatment or other requirements which a water system must follow.
Milligrams per liter (mg/l) - Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).
Micrograms per liter (ug/l) - Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).
Non-Detects (ND) - Laboratory analysis indicates that the constituent is not present.
(1) - The above test results represent the water quality results of distribution samples collected by the St James Water District. Noting that the District purchases the water from the Suffolk County Water Authority, the District does not collect source water samples. This information can be obtained directly from the Suffolk County Water Authority.
(*) - No MCL has established for sodium. However, 20 mg/l is a recommended guideline for people on high restricted sodium diets and 270 mg/l for those on moderate sodium diets.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Although our drinking water met or exceeded state and federal regulations, some people may be more vulnerable to disease causing microorganisms or pathogens in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, Giardia and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791). The EPA's website is www.epa.gov/safewater/, and the NY State Department of Health's website is www.health.state.ny.us/

WHY SAVE WATER AND HOW TO AVOID WASTING IT?

In 2012, the St. James Water District continued to implement a water conservation program in order to minimize any unnecessary water use. We have some water saving devices at our office for your convenience at no charge. We also have pamphlets describing various water saving ideas. Residents of the District can implement their own water conservation measures such as retrofitting plumbing fixtures with flow restrictors, adding rain sensors to automatic lawn sprinklers, and by installing water saving toilets. We also ask consumers to repair leaks, install water conservation fixtures and maintain a constant awareness of water conservation in their personal habits.

Automatic sprinkler systems draw a tremendous amount of water. Please reframe from watering between 4am and 8am, and run only every third day. This will help alleviate problems of low pressure during peak morning hours. Sprinklers might have to run more often during July and August, and much less during the spring and fall.

WATER SYSTEM INFORMATION

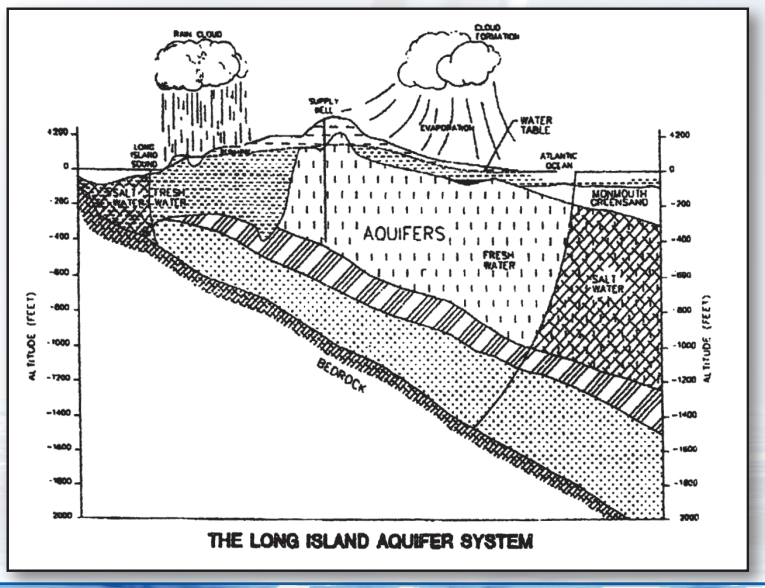
Occasionally, a surge of rusty water enters our system. We flush the affected area immediately, and flush the entire system once a year during a two week period in April at night. Post cards are sent out prior to each flushing. Our staff attends educational seminars throughout the year to keep on top of an ever increasing sophisticated water system. We are a member of the Long Island Water Conference and the American Water Works Association.

ADDITIONAL TESTING

In 2012, the District conducted a monitoring sample for Asbestos, and the results were ND (non-detectable). The District was not required to take radiological samples. Also, because of past testing, Suffolk County has been waived testing for the following compounds; Aldicarb, Aldicarb sulfone, Aldicarb sulfoxide, Carbaryl, Carbofuran, 3-hydroxycarbofuran, methomyl, oxamyl, alachlor, aldrin, chlordane, dieldrin, endrin, heptachlor, heptachlor epoxide, lindane, methoxychlor, dibromochloropropane, and ethylene dibromide.

Every three years we are required to perform lead and copper water sampling from specific houses. Houses are chosen according to the NYS Health Department regulations. There are no houses with lead services in our district, so houses were chosen from those built just before the lead solder ban went into effect in the Town of Smithtown (1987). We appreciate those homeowners who participate in the testing. No sample has ever exceeded the lead Action Level Limit of 15 ug/L (ppb) or the copper Action Level Limit of 1.3 mg/L (ppm). In 2010, the 90th percentile result for lead was 2.56 ppb and for copper 0.42 ppm. The range for lead was between ND (non-detectable) to 5.99 ppb. The range for copper was between ND and .44ppm.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. It is possible that lead levels in your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. The St. James Water District is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at http//www.epa.gov/safewater/lead.



THE LONG ISLAND AQUIFER SYSTEM